

Abstract**Method to Produce a Piezoelectric Thick Film on a Substrate**

- 5 A method of producing a piezoelectric ceramic thick film on a substrate, said method comprising:
- 10 providing a piezoelectric ceramic material in powder form; forming a liquid mixture by mixing the powdered material with a liquid phase precursor of a metal oxide of low-melting point, said precursor being adapted to decompose, upon subsequent annealing, into the metal oxide; drying the liquid mixture to form a precipitate; milling the precipitate to form a powdered precipitate; adding an organic carrier to the powdered precipitate; further milling the precipitate to form a paste; depositing a layer of the paste, as a wet film, onto the substrate; and annealing the
- 15 layered substrate at a temperature and for a time sufficient to cause transformation of the paste into the thick film.

[Figure 1]